

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed January 13, 2005. Upon entry of the amendments in this response, claims 1 – 14 remain pending. In particular, Applicants have amended claims 1 – 5, 10 and 11, and have canceled claims 15 - 20 without prejudice, waiver, or disclaimer. Applicants have canceled claims 15 - 20 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Claim Rejections - 35 U.S.C. § 103(a)

The Office Action indicates that claims 1, 4, 11-12, 15-16, and 19-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Teng* in view of *Shah*. The Office Action further indicates that claims 2 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Teng* in view of *Shah* as applied to claim 1, and further in view of *Ban*; and that claims 3, 5, and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Teng* in view of *Shah* as applied to claim 1, and further in view of *Duke*. Additionally, the Office Action indicates that claims 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Teng* in view of *Shah* and further in view of *Duke* as applied to claim 6 above, and further in view of *Fan*; and that claims 13-14 and 17-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Teng* in view of *Shah* as applied to claim 1, and further in view of *Fan*. With respect to claims 15 – 20, Applicants have canceled these claims, and respectfully assert

that the rejections as to these claims have been rendered moot. With respect to the remaining claims, Applicants respectfully traverse the rejections.

With respect to *Shah*, that reference generally involves:

a scheduling scheme that uses an estimated rasterization execution time (RET) to improve the productivity of printers, particularly color printers. Because print jobs have different levels of complexities, a longer RET may be required for some jobs than for others. For example, a print job which includes color graphics, color print, different font changes or a variety of style formats such as, italic, bold and other styles, will have a longer RET than a simple black and white print job. ***If a print job is pre-scanned to estimate the RET before the print job arrives at the printer, it is possible to schedule those print jobs with a shorter RET ahead of those print jobs with a longer RET, thus improving productivity of the printer.***

(*Shah*, Abstract). (Emphasis added).

Additionally, *Shah* discloses:

Since the majority of print jobs fall into the simple category, users are frustrated with waiting for complex jobs to finish which were submitted ahead of their jobs. Therefore, ***to balance the functions between the ESS and the IOT, the present invention uses a two queue approach. For example, the print jobs which require a minimum amount of time for the ESS to process, i.e., the simple jobs, are placed in one queue, e.g., a simple queue, and the print jobs which are more complex and time consuming for the ESS are placed in a second queue, e.g., a complex queue. The print jobs which are in the simple queue are ripped and printed first, even if these print jobs arrive after the complex jobs, and then the print jobs in the complex queue are processed.*** This reduces the IOT idle time which significantly improves the wait time for simple print jobs.

A print driver, preferably located in the workstation, pre-scans a document and takes the document file and converts it into a postscript (page description language, PDL) print ready file. Additionally, the print driver attaches a header to the file. The header will identify the complexity level of the document file, including whether the file is color or black and white, e.g., simple or complex. The printer, or print server, will read the header information and, based on the header information, schedules the print jobs by placing the document file into an appropriate queue, e.g., a simple queue or a complex queue. ***Print jobs in the simple queue will have a higher priority than print jobs in the complex queue.***

The two queue approach is for simplicity purposes. *Alternatively, a single queue can be used in which the jobs are arranged in ascending order of their RET estimates. The jobs with the smallest RET estimates will be ripped and printed first.*

(Shah, column 1, line 64 through column 2, line 29). (Emphasis added).

Clearly, *Shah* involves estimation of processing times of print jobs. However, prioritizing the printing of these print jobs is based on the estimated processing times, irrespective of the order in which the print jobs are received and/or when deferred start times have been established. This is in direct contrast to the features/limitations recited in Applicants' pending claims.

In this regard, claim 1 has been amended to recite:

1. A method of relieving competition between processing jobs sharing a production device, said method comprising:
 - a. accessing from a user's browser a destination service representing at least one production device;
 - b. retrieving said user's imaging information by said destination service;
 - c. selecting among production options provided by said destination service for determining a first processing job to process said imaging information using said at least one production device;
 - d. estimating the time duration required to process said first processing job using said at least one production device with said selected production options;
 - e. providing said user an option of reserving a start time for deferred processing of said first processing job using said at least one production device in accordance with said selected production options; and
 - f. if said user opts to reserve a start time, then setting a first deferred start time, storing said first processing job during a deferral period until said first deferred start time occurs, and then deferred processing said first processing job using said production device in accordance with said selected production options *such that, if processing of a second processing job is requested during a time period that includes any remaining portion of the deferral period and the estimated processing time of the first processing job, an option of*

reserving a second deferred start time for deferred processing of the second job is provided, the second deferred start time occurring after an estimated completion time for deferred processing of said first processing job.

(Emphasis added).

Applicants respectfully assert that the cited references, either individually or in combination, fail to teach or reasonably suggest at least the features/limitations emphasized above in claim 1. Therefore, Applicants respectfully assert that claim 1 is in condition for allowance. Insofar as claims 2 - 10 are dependent claims that incorporate the features of claim 1, Applicants respectfully assert that these claims also are in condition for allowance. Additionally, these claims recite other features that can serve as an independent basis for patentability.

With respect to claim 11, that claim has been amended to recite:

11. A destination service representing a production device, said destination service operable to:

download content into a browser;

retrieve first imaging information;

select, under user interactive control via said content, from among production options for processing said first imaging information using said production device;

estimate the time duration required to process said first imaging information using said production device in accordance with said selected production options;

provide an option of reserving a first deferred start time for deferred processing of said first imaging information; and

if a first deferred start time is reserved, interactively determine said first deferred start time and implement deferred processing of said first imaging information in accordance with said selected production options *such that, if processing of a second processing job using said production device is requested and processing of the second processing job cannot be completed by the production device prior to the first deferred start time of the first processing job, an option of reserving a second deferred start time for deferred processing of the second processing job is provided, the second deferred start time*

occurring after the estimated completion time for deferred processing of said first processing job.

(Emphasis added).

Applicants respectfully assert that the cited references, either individually or in combination, fail to teach or reasonably suggest at least the features/limitations emphasized above in claim 11. Therefore, Applicants respectfully assert that claim 11 is in condition for allowance. Insofar as claims 12 - 14 are dependent claims that incorporate the features of claim 11, Applicants respectfully assert that these claims also are in condition for allowance. Additionally, these claims recite other features that can serve as an independent basis for patentability.

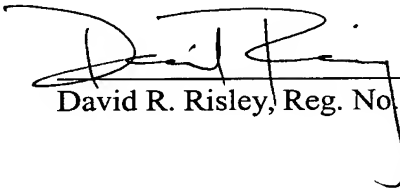
Cited Art of Record

The cited art of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

Applicants respectfully submit that Applicants' pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,


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